

539, 060

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
15 July 2004 (15.07.2004)

PCT

(10) International Publication Number
WO 2004/058870 A1

(51) International Patent Classification⁷: C08K 5/5393,
5/53, 5/52, 5/527, 5/526, 5/524

(21) International Application Number:
PCT/US2003/040117

(22) International Filing Date:
17 December 2003 (17.12.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/433,771 17 December 2002 (17.12.2002) US

(71) Applicant and

(72) Inventor: EL-HIBRI, Mohammad, Jamal [LB/US];
6851 Roswell Rd., N° M-18, Atlanta, GA 30328 (US).

(74) Agents: LAVALLEYE, Jean-Paul et al.; Oblon, Spivak,
McClelland, Maier & Neustadt, P.C., 1940 Duke Street,
Alexandria, VA 22314 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR,
CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR,
KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,
MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU,
SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,
UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (BW, GH,
GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE,
SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA,
GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: 4,4'-BIPHENOL POLYSULFONE COMPOSITIONS, PROCESS TO PREPARE THEM, AND ARTICLES MADE THEREOF

(57) Abstract: 4,4'-Biphenol polysulfone composition comprising: as main ingredient, at least one polysulfone comprising more than 50 mol.% of recurring units formed by reacting 4,4'-biphenol with at least one sulfone monomer SM₁ (B⁰¹PSU), more than 0.01% by weight, based on the total weight of the composition, of at least one phosphorus-containing compound chosen from organic phosphites and organic phosphonites, and at least one polysulfone comprising more than 50 mol.% of recurring units formed by reacting bisphenol A with at least one sulfone monomer SM₂ (B⁰¹A PSU). 4,4'-Biphenol polysulfone composition containing at least 60% by weight, based on the total weight of the 4,4'-biphenol polysulfone composition, of at least one B⁰¹PSU, said composition having a melt viscosity ratio at 410°C and at a shear rate of 50 s⁻¹ (VR₄₀) of below 1.20. Process which is especially well-suited to prepare the above compositions. Articles made from the above compositions or prepared by the above process.

WO 2004/058870 A1

